

LARZEP®

HYDRAULIC

MAMMUT

HEAVY LIFT (HL) JACKS



Operating & Maintenance Manual

HL06022

*Read this manual carefully before deploying and using the jack.
Comply with all safety precautions and maintenance recommendations.*

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	<i>DANGER! BE PARTICULARLY CAREFUL</i>
	<i>CRUSHING DANGER</i>
	<i>MANDATORY OPERATIONS OR JOBS TO BE PERFORMED COMPULSORILY</i>
	<i>FORBIDDEN!</i>

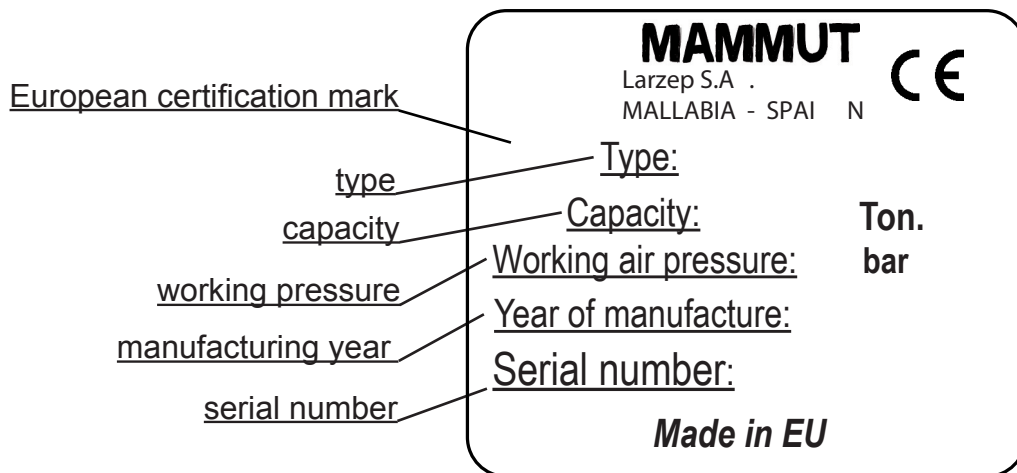
Foreword

Congratulations on purchasing a Mammut Heavy Lift (HL) Jack.

Prior to use, carefully read these instructions and become acquainted with the safety symbols.

- This handbook is an integral part of the machine which must be kept safely on hand for the operator to consult whenever needed.
- The contents of this manual comply with Machine Directive 2006/42/EEC and the jack is type approved in conformity with the European Norm EN 1494 and AS/NZS 2693:2007 standards.
- The manufacturer reserves the right to make modifications without prior notice and without incurring any sanctions whatsoever, without prejudice to the safety and main technical characteristics.
- Failure to observe these instructions may cause personal injury, which in some cases may be fatal.
- The manufacturer is not liable for any damage to property or injury to people caused by erroneous or incorrect use of this product.

The identification plate is located on the side of the casing. **DWG. 1**



SAFETY REGULATIONS



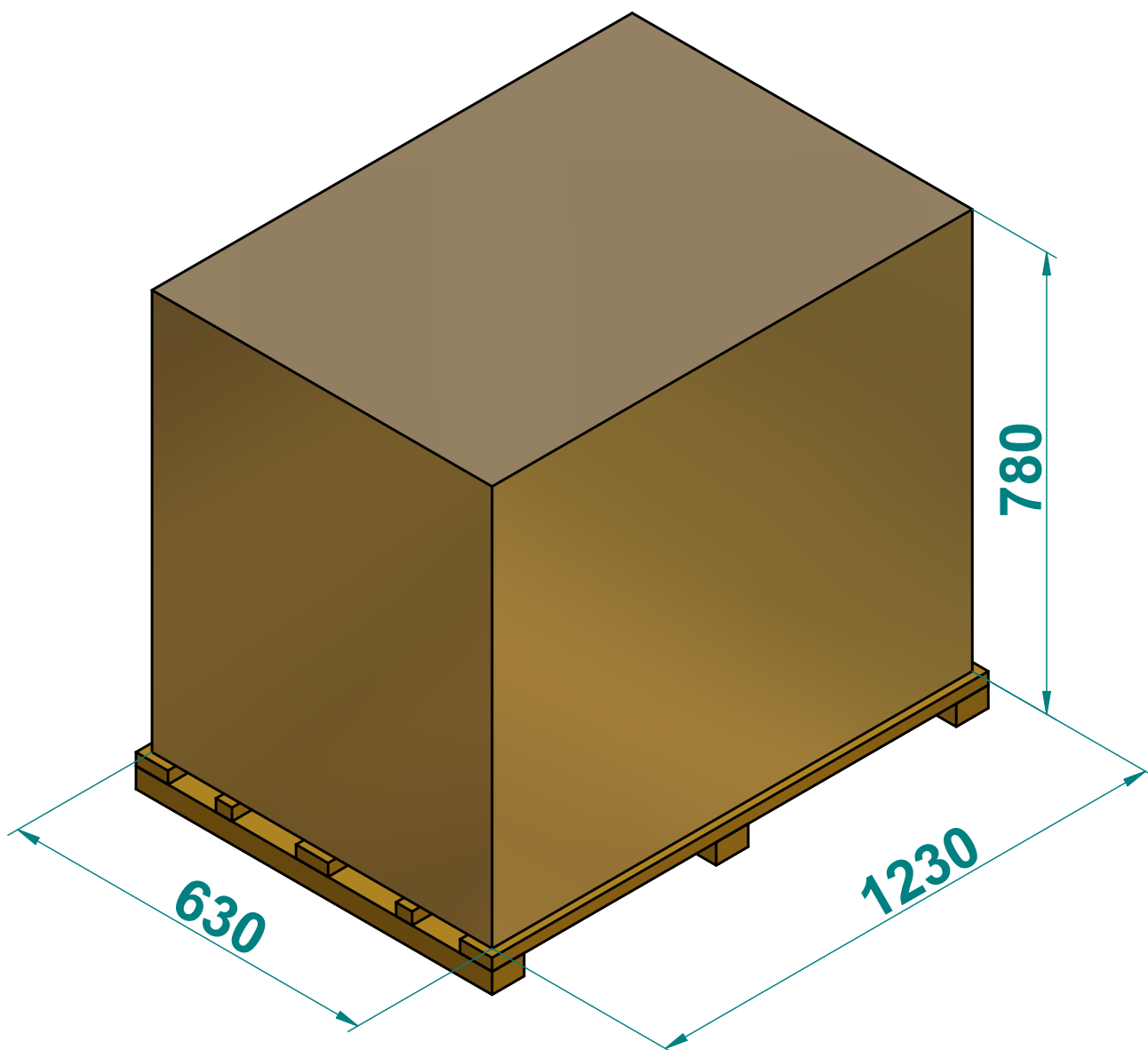
- Only authorised personnel are permitted to use the equipment and must know the contents of this operating and maintenance handbook.
- The jack is an apparatus for lifting only and not for supporting, it is therefore absolutely forbidden to work in any way under the vehicle being lifted until it is placed on appropriate stands. **DWG. 2**
- Before starting to lift a vehicle, the park brake must be engaged.
- If the vehicle is loaded, check load stability when lifting.
- Place the jack so that the load is centred over it at the appropriate lifting points, as indicated by the vehicle manufacturer.
- During lifting and lowering, it is necessary to check there are no persons or animals under the suspended load or in the vicinity.
- Before lowering the load ensure the handle is in the horizontal position.



- To avoid the risk of becoming trapped, do not lift the load in a confined space.
- It is forbidden to use more than one jack simultaneously on the same load.
- Never tamper with the pressure relief valve identifiable by the guarantee seal **(DWG. 3)**.

Packing

- The jack is packed in a three-layer corrugated cardboard box with pallet. This operating and maintenance manual and the warranty certificate are also inside the box.
- The packing is stackable.
- Either transpallets or forklift-trucks are used for handling.



Preparing For Use

CONNECTION TO COMPRESSED AIR

- Compressed air enters into the jack circuit through the quick coupling 4057; it is therefore necessary to have a connecting pipe with a quick coupling compatible with ½" GAS thread. Check that the air supply pipe has a useful passage of at least 8 mm and it is not pinched or restricted anywhere. **DWG. 4**



WORKING AIR PRESSURE: 8 - 10 BAR

- Under no circumstances should the following be permitted to enter the compressed air circuit: hydraulic or Vaseline oil, brake fluid, kerosene or other liquids.
- Install a filter dehumidifier-lubricator unit in the compressed air system.
- If you want to lubricate the compressed air circuit use exclusively:

**AGIP OSO 100; MOBIL DTE 27; ESSO TERESSO 100;
SHELL TELLUS 100; BP ENERGOL HP 100**

SCRAPPING AND DISPOSAL

- The lubricants must be disposed of in compliance with the anti-pollution laws in force in the country where the jack is used.
- Scrapping of the jack and its component parts must be carried out by the user in accordance with current local laws.

Accessories

REMOTE CONTROL

- The remote control is available for use in situations where lifting a vehicle could be hazardous for the jack operator. Automatic lifting and lowering can be controlled with the remote control.



Please contact your Larzep distributor for more information on accessories.

Use

- Expressly observe the safety rules already described in this manual.

1. Position the jack under the lifting points as described in the manual of the vehicle manufacturer.



The manufacturer is not responsible for any break or damage to the lifted vehicle or to persons or property due to incorrect use of the jack.

2. The handle positioning lever (A) **DWG. 5** is on the left in relation to the worker. By moving it upwards the stopping system is released so the worker can then choose one of the four possible handle positions.

3. When lever (B) is in the central position, the jack is in the idle status.

4. Move lever upwards to lift the load.

5. Move lever downwards to lower the load **DWG. 5**.

6. After lifting the load, it is absolutely essential to rest it on support stands before doing any work under it.



**REMEMBER THAT THE JACK IS A LIFTING DEVICE
AND NOT A SUPPORTING DEVICE!!**

- The operator's employer should provide the necessary training and supply the necessary information about the pumping and shifting forces.

- If the distributor breaks during use, work directly on the flow of air, closing the safety cock no. 398, between the quick coupling of the air inlet and the distributor itself.

- Before working with the jack, it is advisable to perform a few operations with no load in order to acquire the sensitivity necessary to work safely with the jack.

IMPROPER USE

The air-hydraulic jack has been designed and made to lift transport vehicles. Any other use of the jack, such as for instance lifting and/or moving persons, is considered to be definitely improper. All use of the jack not in conformity with the safety rules listed in this manual is considered to be improper use.

Warranty

This jack is covered by a 12-month warranty starting from the date the warranty comes into effect or from the date the jack leaves our factory if it has not already been rendered effective on-line; it covers all manufacturing defects but not transport expenses, defects caused by improper use or damages suffered during transport. For more details please see the card attached to this manual.

Performing Regular maintenance

- To ensure your jack a long life it is advisable to clean the pistons externally once a fortnight.
- **Check the level of oil in the tank at least twice a year:** this must be done with the pistons completely lowered. The oil level must reach the small bolt that is on the rear side of the tank, beneath the handle. Check oil level by loosening this bolt. If you have to top up the oil in the tank ensure the oil you are using is compatible with what is already inside the tank so as not to compromise machine integrity.
- If the oil level is higher than it should be, even by only a little, or if the jack has been turned upside down (as can easily happen during transport), the oil is expelled through the suction pump as mist. This phenomenon disappears on its own when the oil level has been restored. If the oil inside the tank exceeds the level by a lot, it is advisable to remove some until it is back in the norm.

Air Bleeding

It is recommended that air be bled each time the jack is serviced, or when parts connected to the motor pump and tank are removed and refitted.

1. The piston must be moved out completely, without oil pressure.
2. **Loosen (NEVER unscrew the dowel completely!)** dowel no. 2534 which is in the hole on the plate.
3. Manually, move the pistons downwards and let all the air out from the dowel, continuing until oil starts coming out and then close the dowel.
4. Move the piston back in completely and check the oil level.
5. Try to operate the jack without any load and if the piston lowers in jerks repeat the procedure at least 2 or 3 times.

REQUESTING SPARE PARTS

WHEN ORDERING SPARE PARTS, THE FOLLOWING MUST BE SPECIFIED:

- 1) LIFT MODEL
- 2) SERIAL NUMBER
- 3) PART NUMBER
- 4) PART DESCRIPTION
- 5) QUANTITY DESIRED

Troubleshooting: must be carried out by a qualified engineer

Problem:	Possible Causes:	Solutions:
The motor will not start, or runs poorly:	A: The air supply line is obstructed or choked. B: The seals (1011) are worn. C: The seals fitted on the piston are not sliding freely.	A: Remove obstruction. B: Replace seals. C: Dismantle and lubricate the cylinder and the piston.
The jack does not lift the load:	A: Oil level is low. B: There is dirt underneath the valves. C: The pistons (89) & (264) which control the opening and closing of the descent valves have become rigid.	A: Replace oil and check level using bolt on rear of tank (1401). B: Completely lower pistons; close taps (1164); disassemble the motor pump unit (4081); loosen cap (518); remove bearings & springs; blow inside to thoroughly clean and remove contaminants; reassemble. If necessary, knock bearings into place (40) & (521). Repeat bleeding operation as described on previous page; resume jack to normal position and reopen tap. C: Dismantle and grease pistons (89) & (264).
The jack rises, but comes down under the load:	A: Valves (40) & (83) are contaminated. B: If Solution A fails:	A: Dismantle assembly (4078); carefully clean under valves (40) & (83); reseat the pin (83) with a light blow from a hammer. If a seal can not be achieved, replace valve (GV0265) and pin (83). B: Drain tank and cylinder of oil; loosen cylinder and check washer (0210) - replace if damaged. Refit all components and tighten cylinder. Fill oil tank. Without load, operate jack a few times; bleed and then top up oil level when pistons are lowered.
The pistons fail to lower completely, even with the lever in the descent position:	A: The piston (138) inside the head of the suction pump (4046) is not sliding properly.	A: Grease or otherwise lubricate the piston (138); unscrew and if necessary, clean the silencer (267). Screw back down.
Oil is leaking from the silencer (1109):	A: The pumping element (2356) is scored or damaged, or the seal (2127) is worn.	A: Replace damaged component (2356 or 2127).
Oil is leaking from the suction pump (4046):	A: Excess oil in tank, or jack was overturned (i.e. in transit).	A: The leak will soon stop.
Oil is leaking from the silencer (267):	A: Integrity of hydraulic block (4078) has been compromised.	A: Replace seals (90) & (26). If leak persists, replace whole unit (4078).
The pistons rise very slowly:	A: The tap (1164) between the tank and motor pump is closed.	A: Open tap (1164).

Larzep Pty Ltd will not be held responsible for damages and operation malfunctions caused by the non-observance of the safety rules contained in this use and maintenance manual.

TECHNICAL DATA SHEET

working air pressure	from 10 to 12 bar	weight (without accessories)	93Kg
working temperature	from -20°C to +50°C	max stroke	227 mm
air consumption	600 nl/min	1nd stage capacity	60 ton.
compatible OILS	ATF DEXRON IID	2nd stage capacity	30 ton.
pneumatic system pipes	Rilsan Di. ø 6 ie. ø 4		

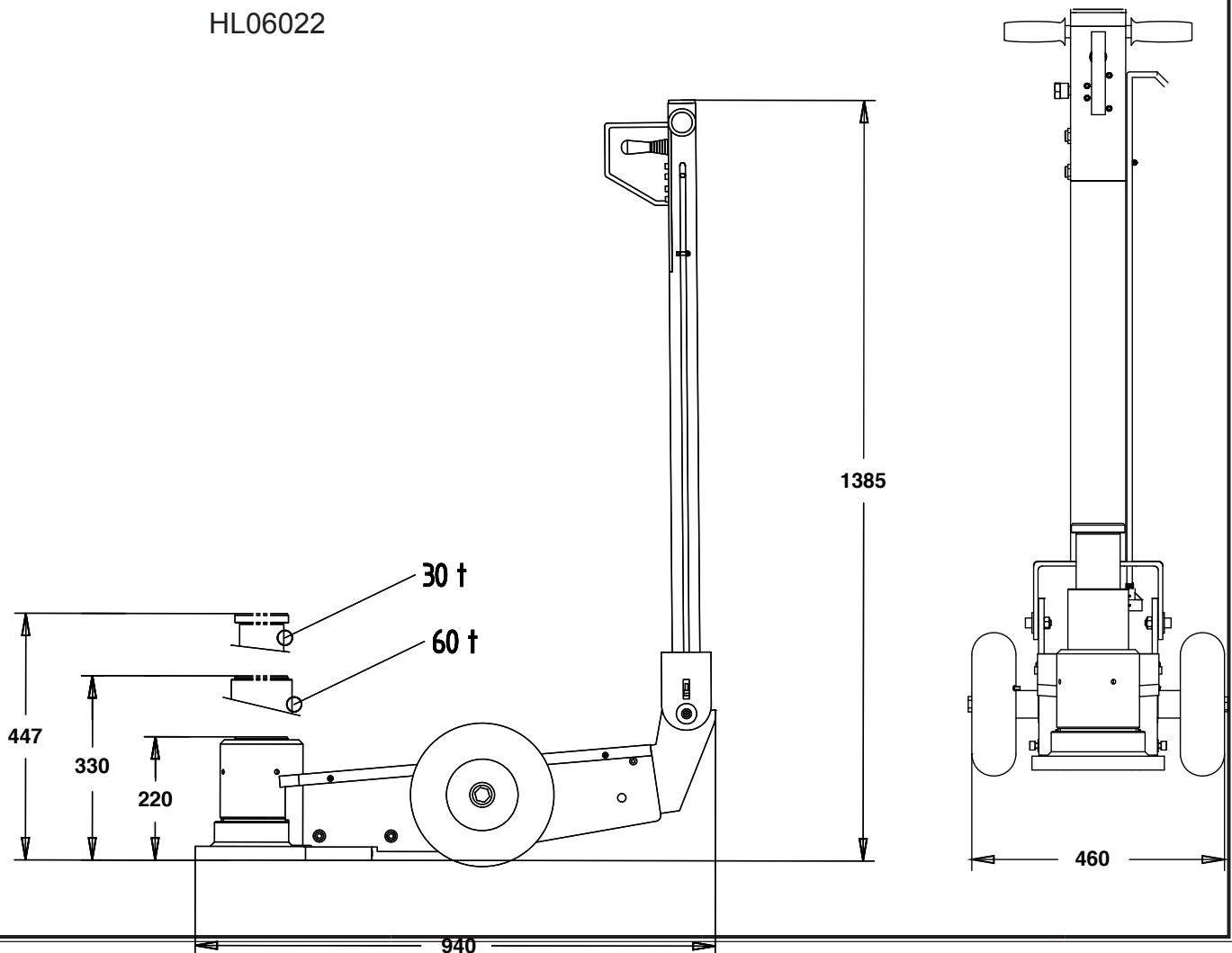
AERIAL NOISE

Tests carried out in conformity with the standards ISO/R 1680 - 1970.

Instrument: LARSON DAVIS 800 B PRECISION ANALYSER PHONOMETER in conformity with the standards IEC 804 E 651 class 1 set with a Larson Davis Ca 250 114/b 250 Hz calibrator before and at the end of the measurements. Acoustic radiation pressure measured 60 dBA.

MEASUREMENTS AND DIMENSIONS

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1.

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Type:

Capacity:

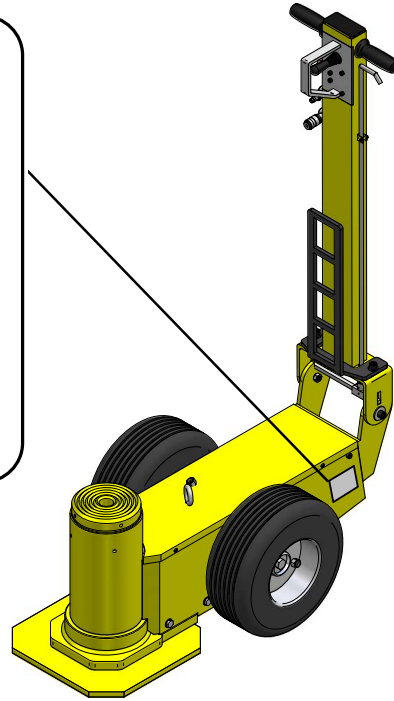
Working air pressure:

Year of manufacture:

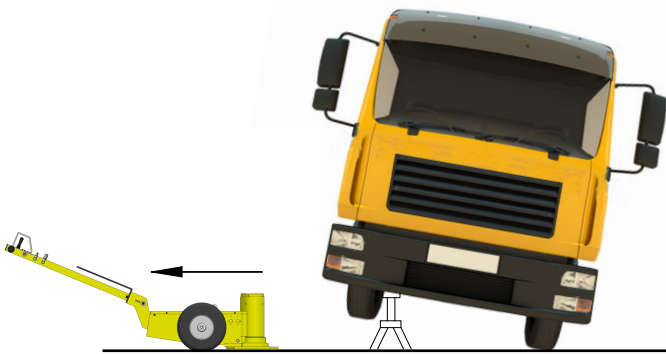
Serial number:

Made in EU

Ton.
bar

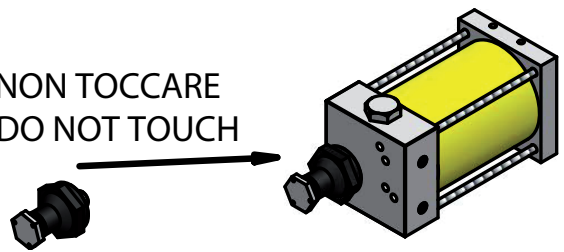


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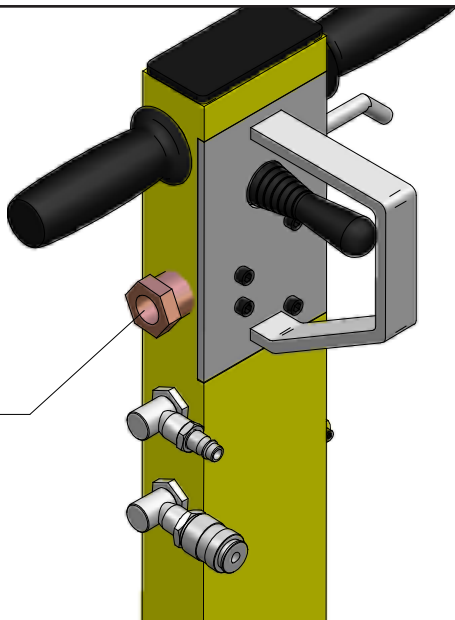
3.

NON TOCCARE
DO NOT TOUCH



4.

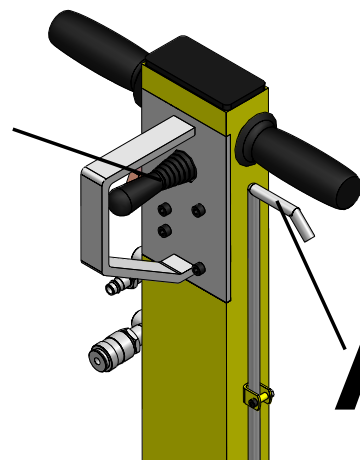
1/2" G
AIR

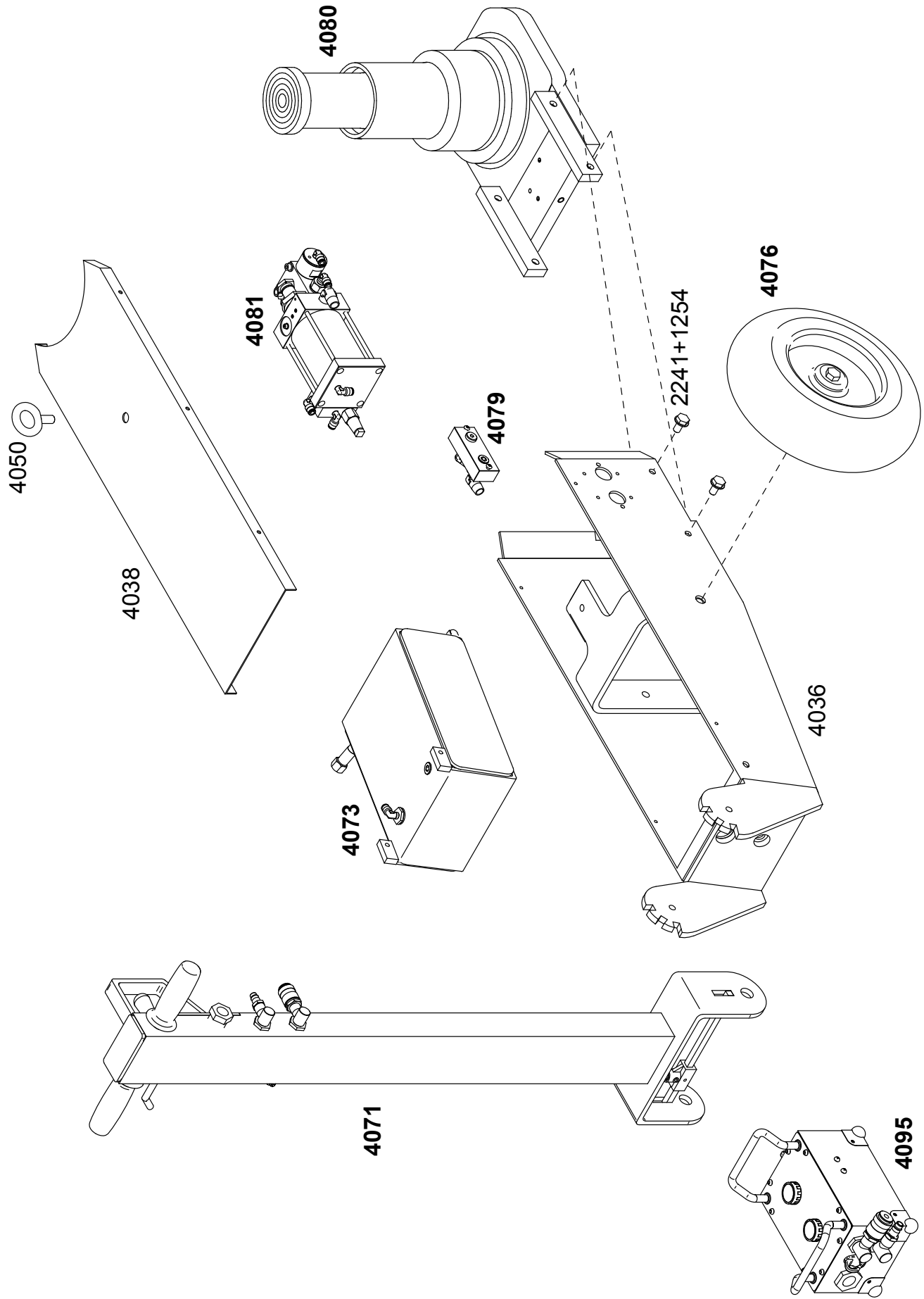


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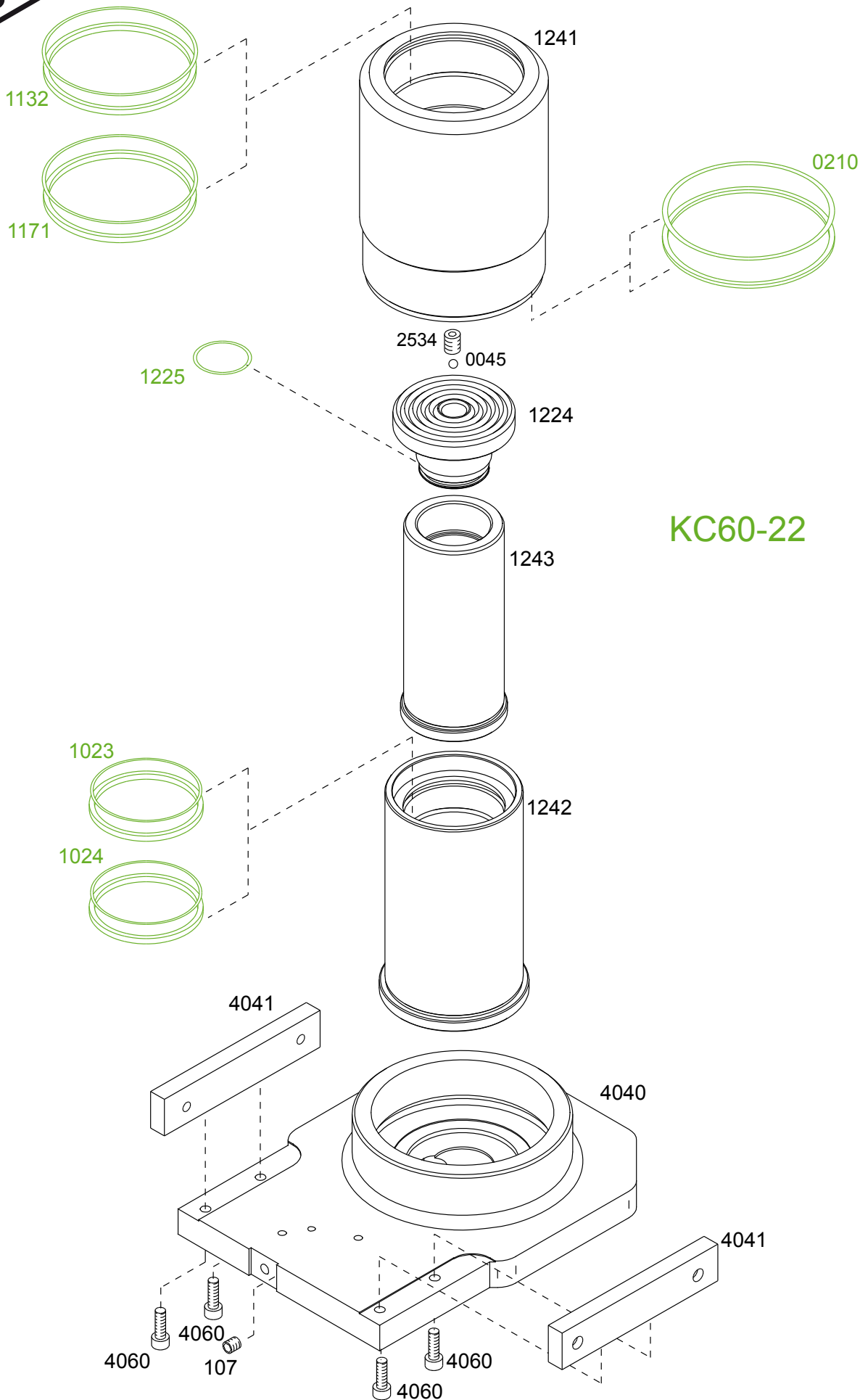
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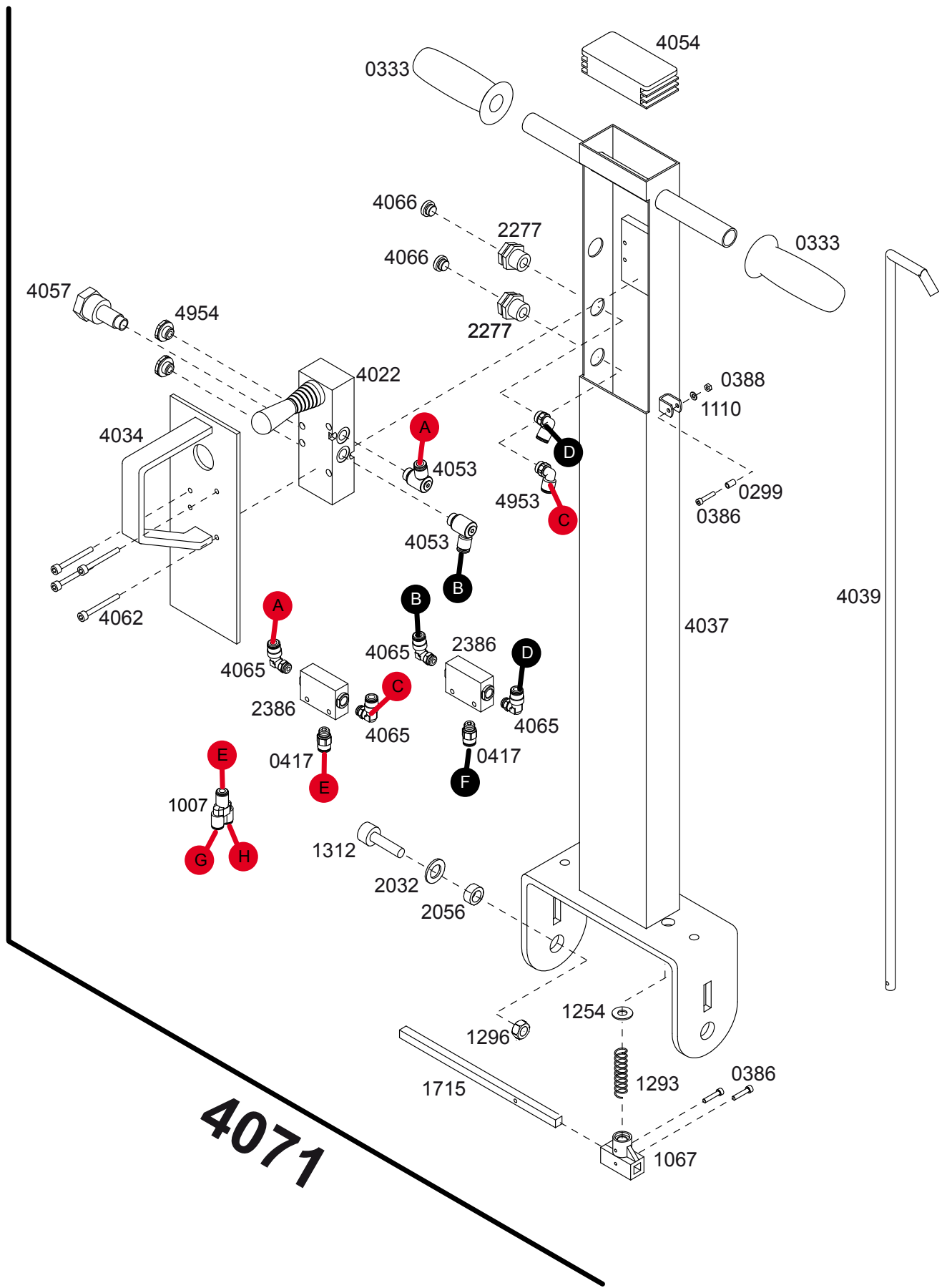
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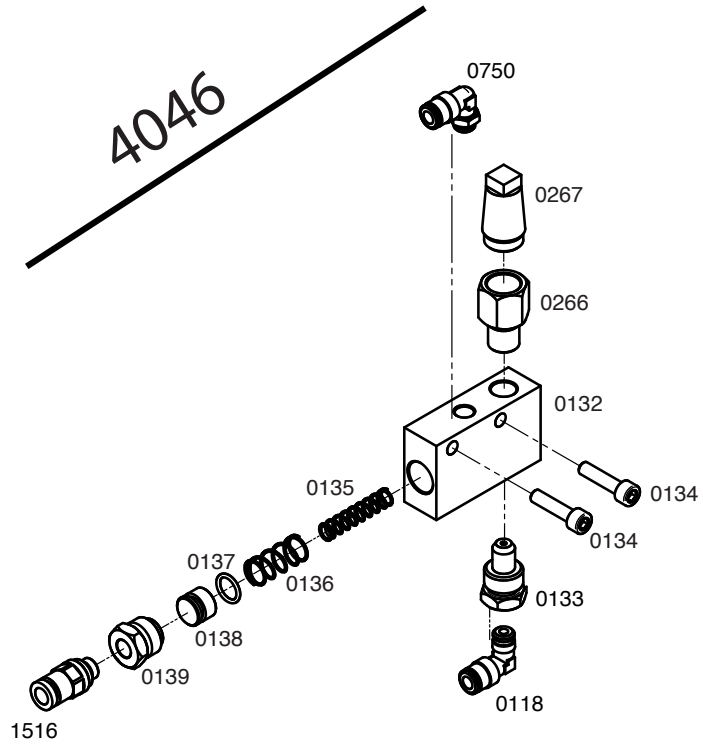
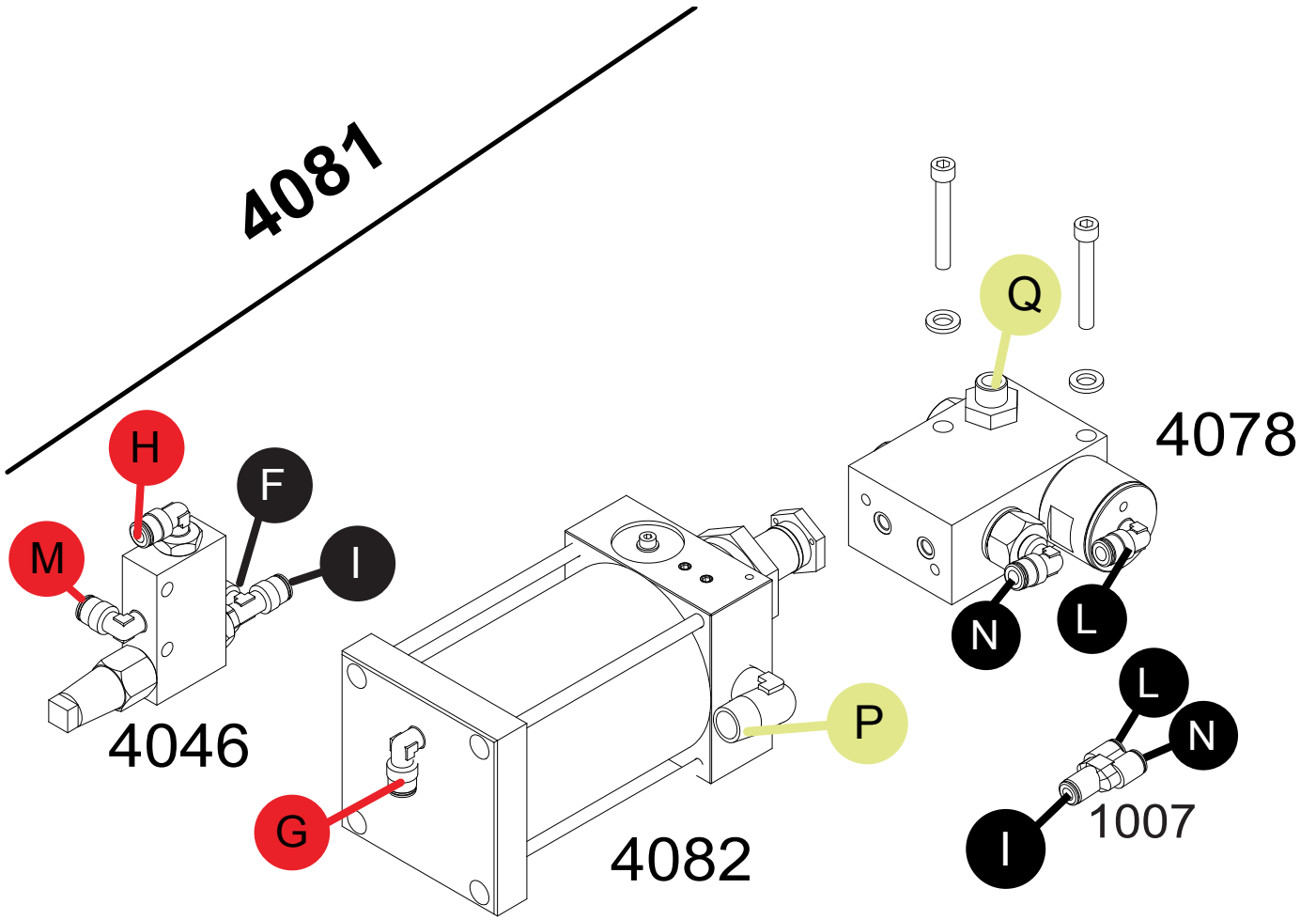


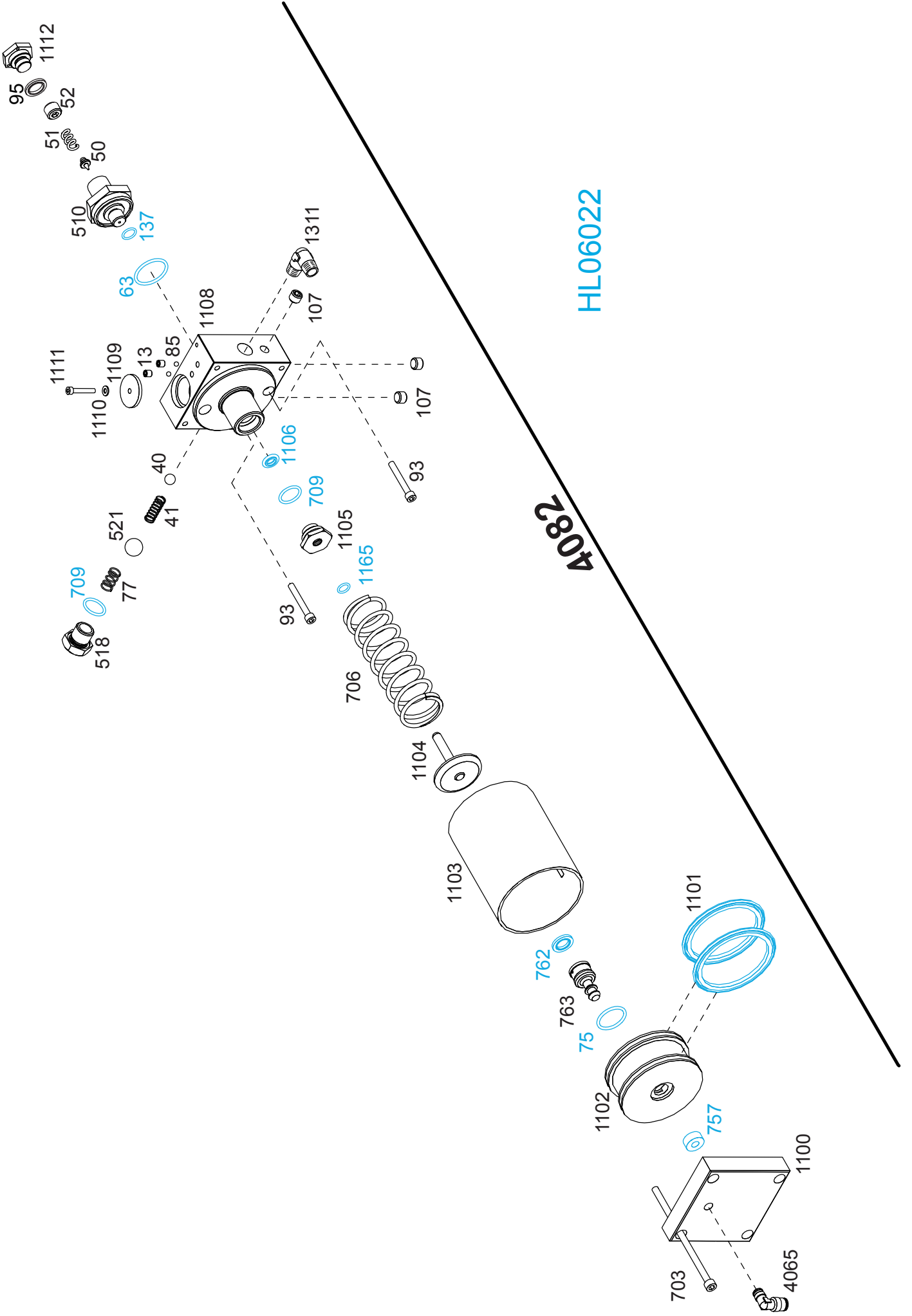


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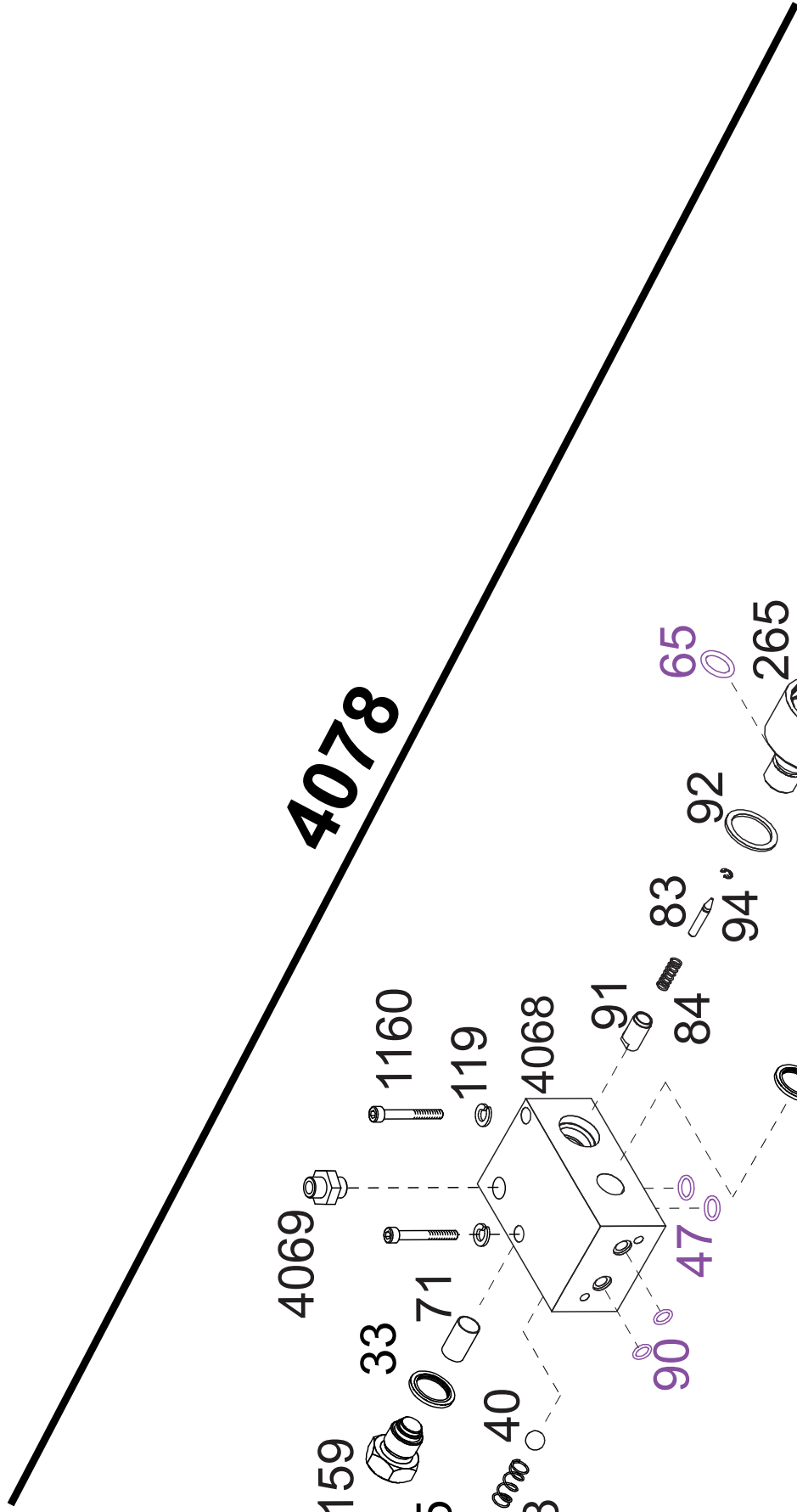








4078



1117

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263

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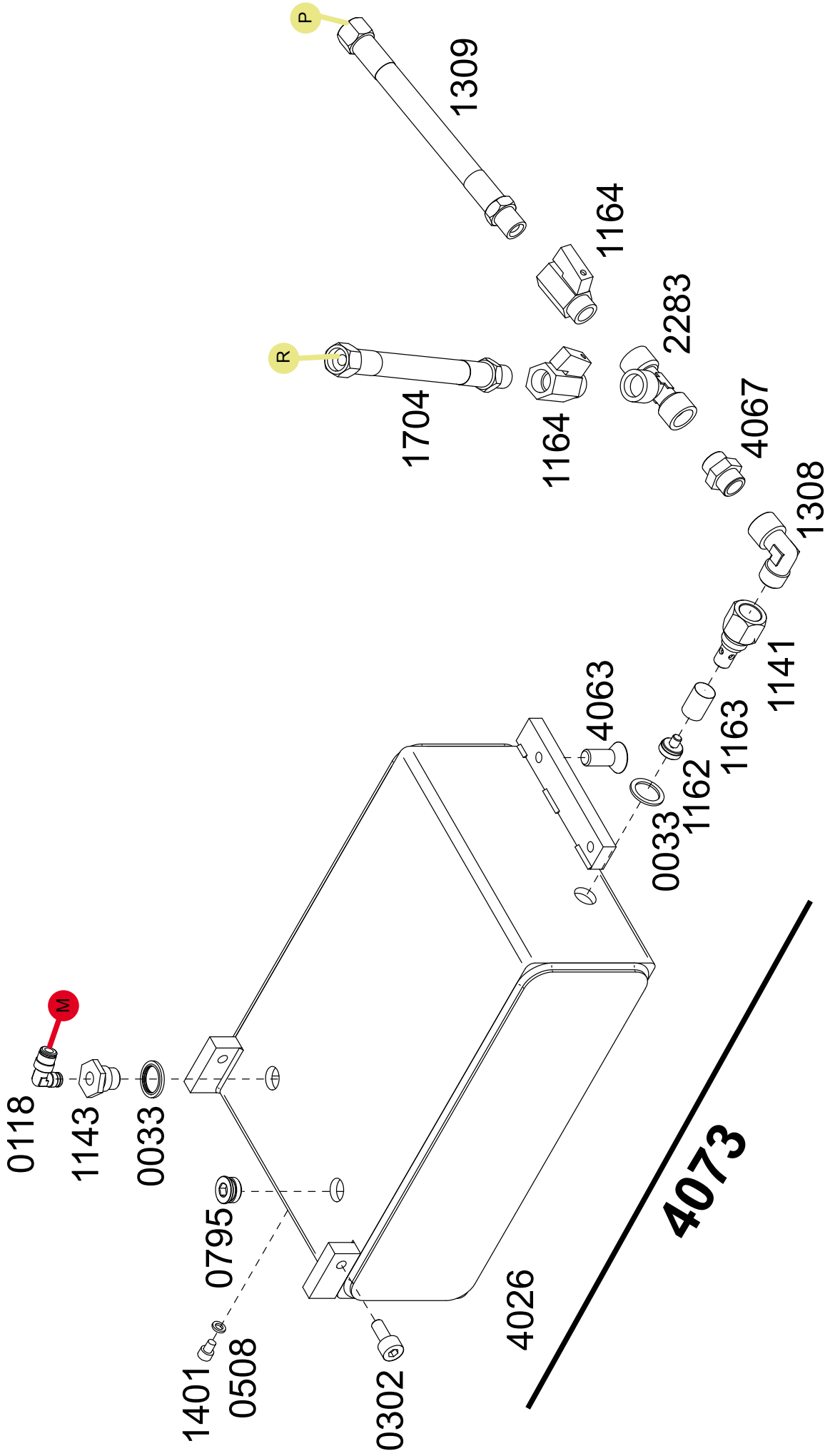
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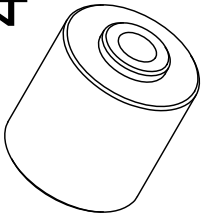
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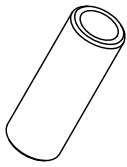
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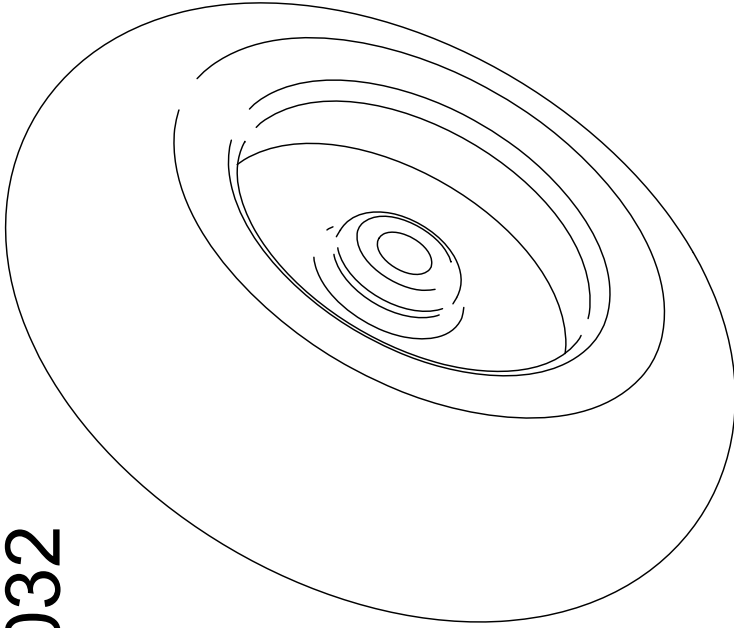
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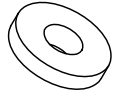
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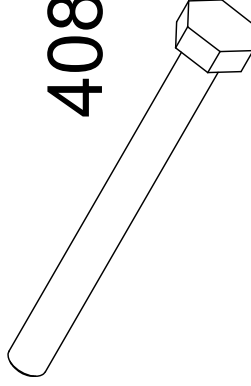
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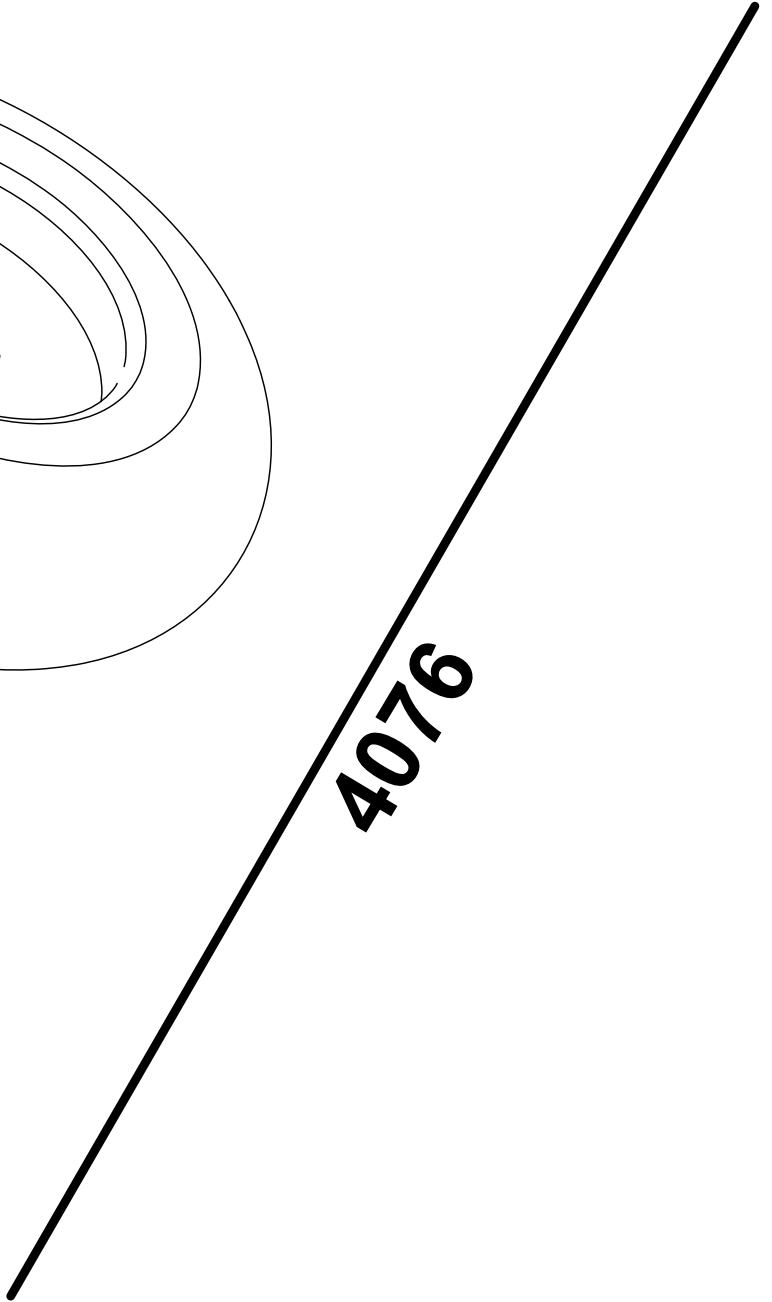
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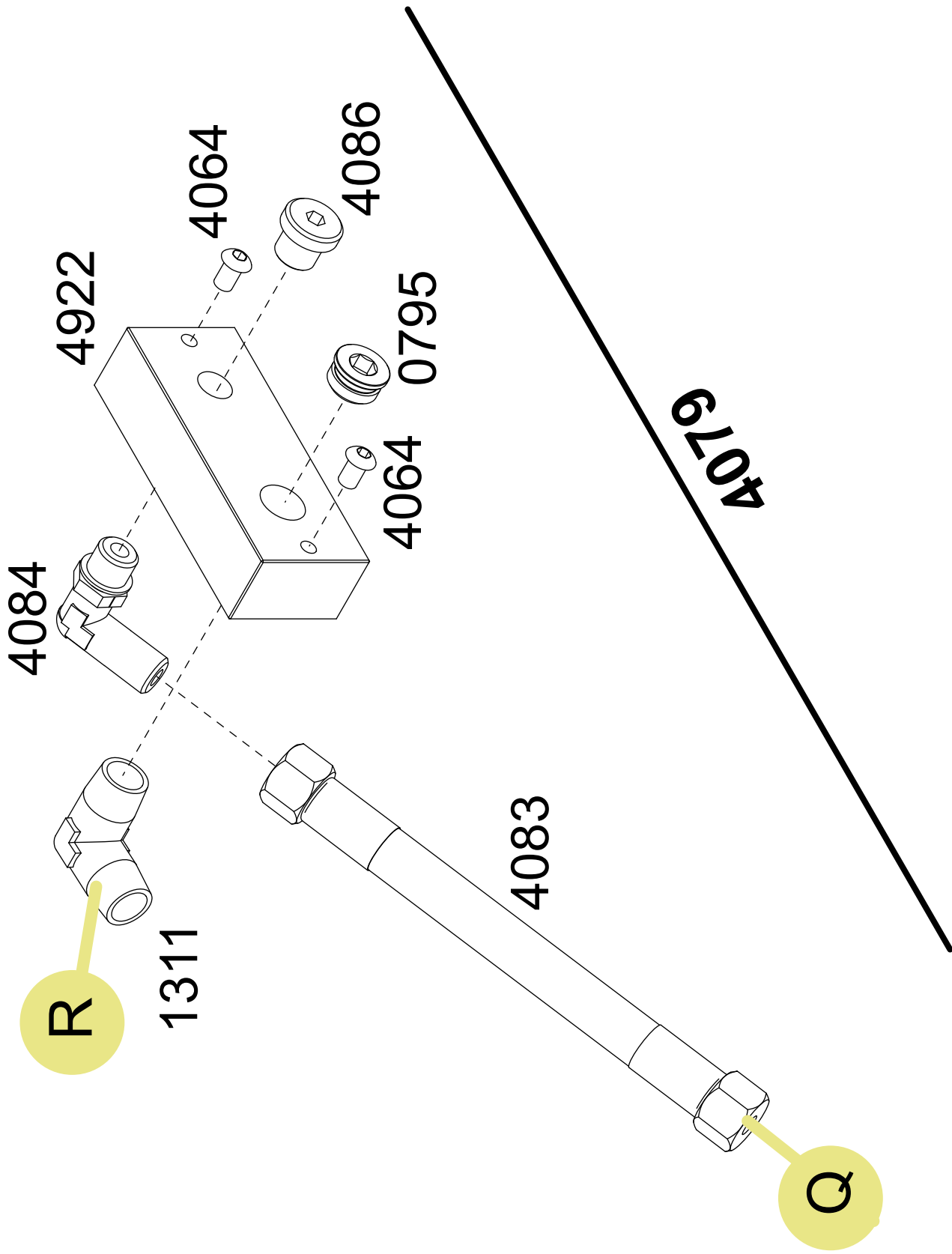


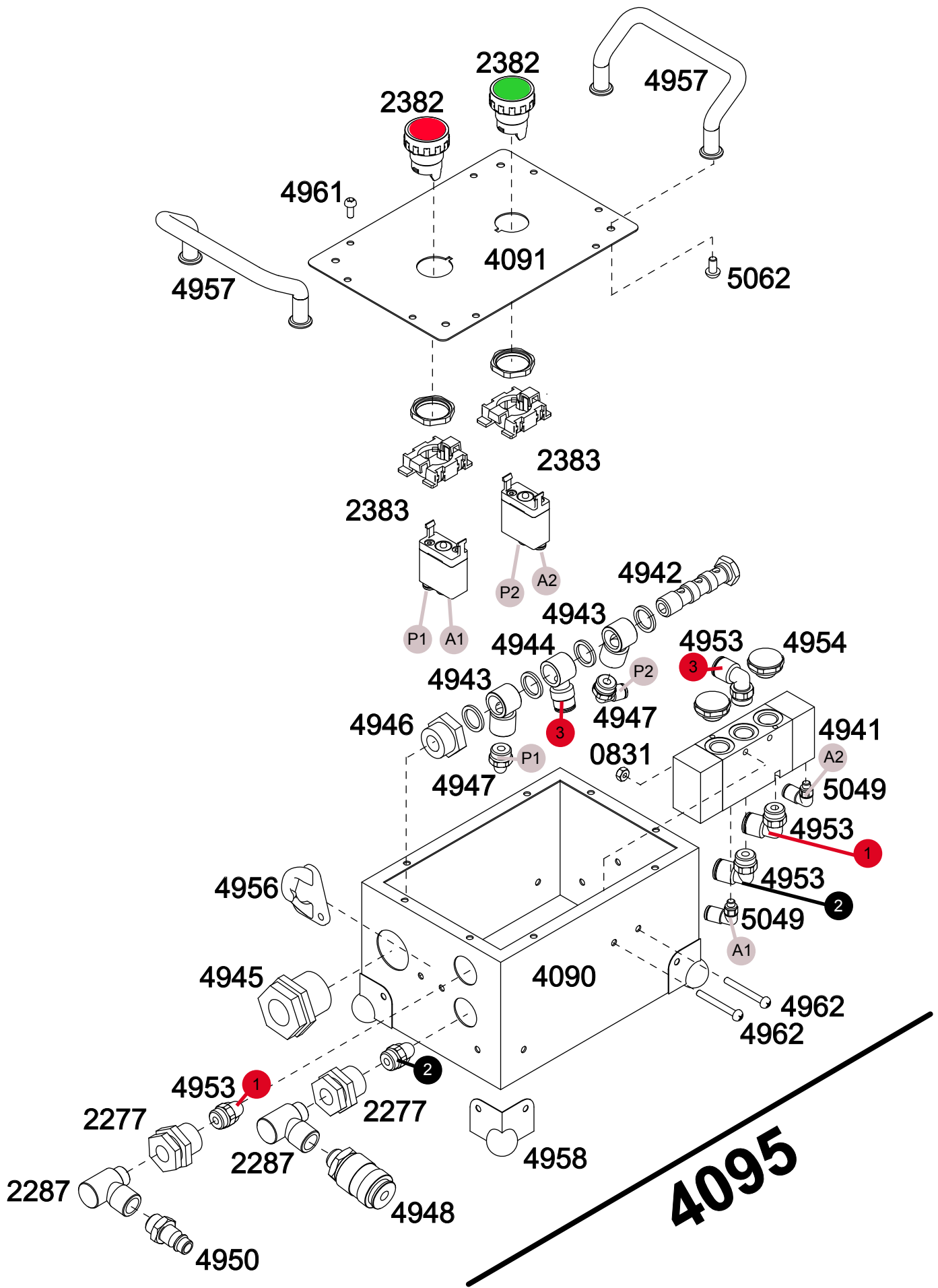
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